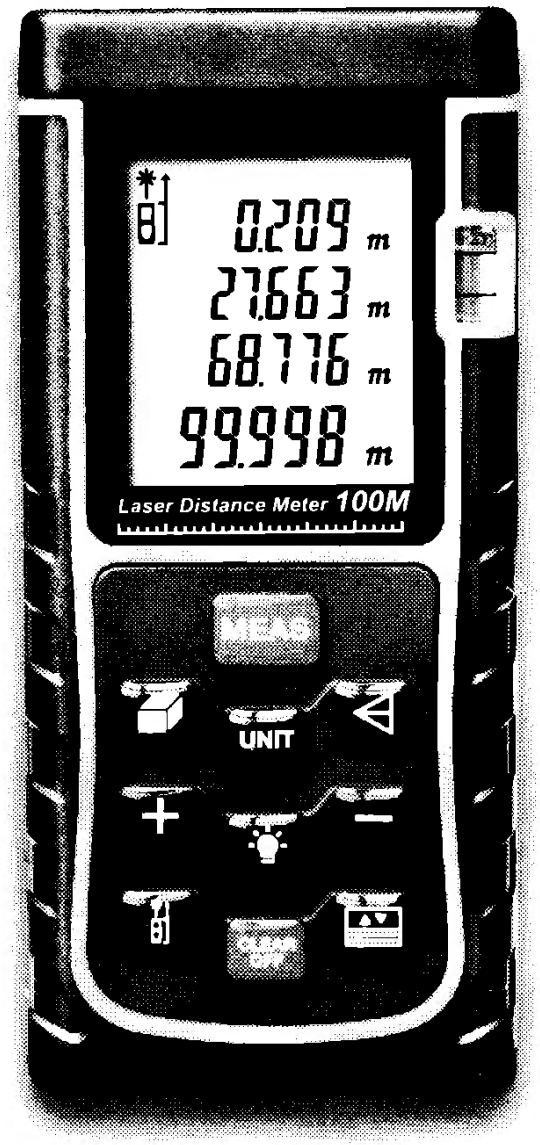


User's Manual

hand-held laser distance meter

Safety regulations

Please read the safety regulations and operation guide carefully before operating.

⚠ Please read all of the operational guide and safety regulations in this manual before operation . Improper operations without complying with this manual guided could cause damage to the device, influence on measurement result or bodily injury to the user.

⚠ The instrument is not allowed to disassemble or repair in any ways. It is forbidden to do any illegal modification or performance change for laser emitter. Please keep it out of reach of children and avoid using by any irrelevant personnel.

⚠ It is strictly prohibited to shoot eyes or other parts of body with the laser; it is not allowed take the laser to shoot any objects' surface with strong reflecting.

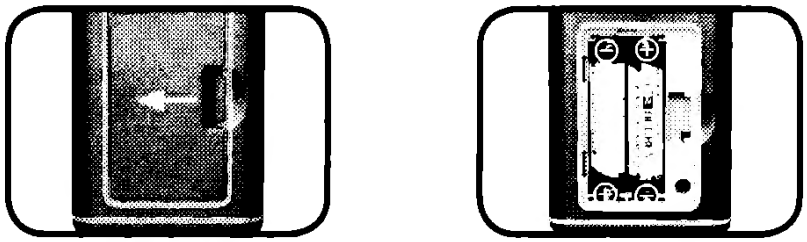
⚠ Due to electromagnetic radiation interference to other equipment and devices, please don't use the meter in the plane or around medical equipment, don't use it in inflammable, explosive environment.

⚠ Discarded batteries or meter device shall not processed just like household garbage, please handle them in line with related law and regulations.

⚠ Any quality issues or any questions on the meter, please contact local distributors or manufacturer in time, we are ready to offer solutions for you.

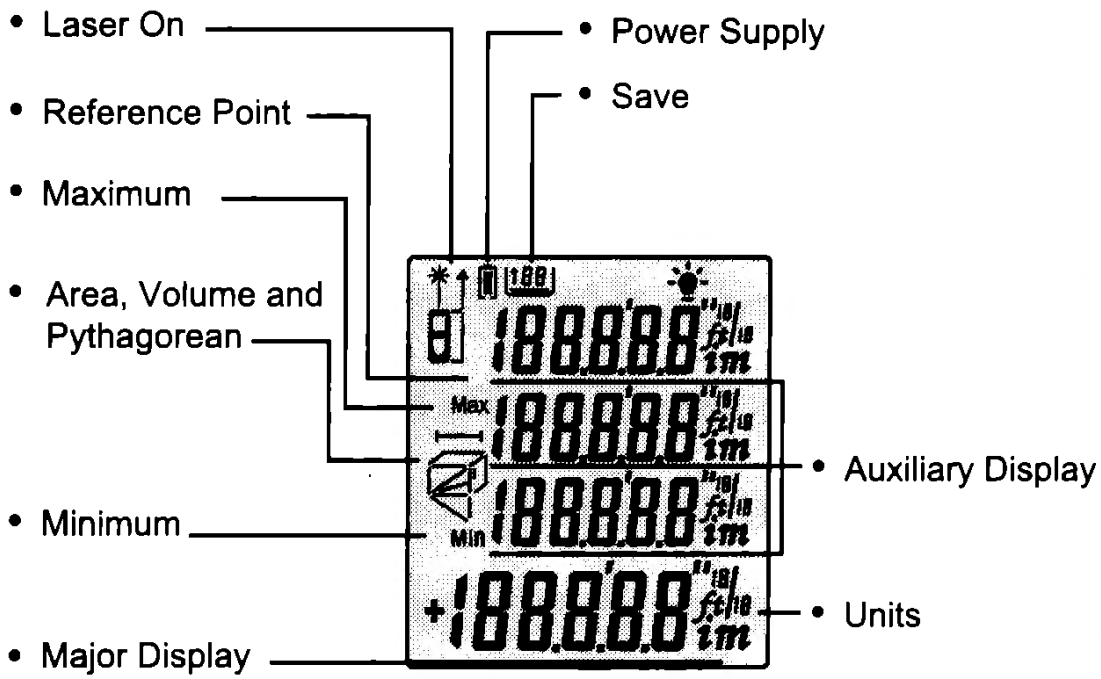
Professional casts quality and good quality gets reputation

● Battery Installation and Replacement

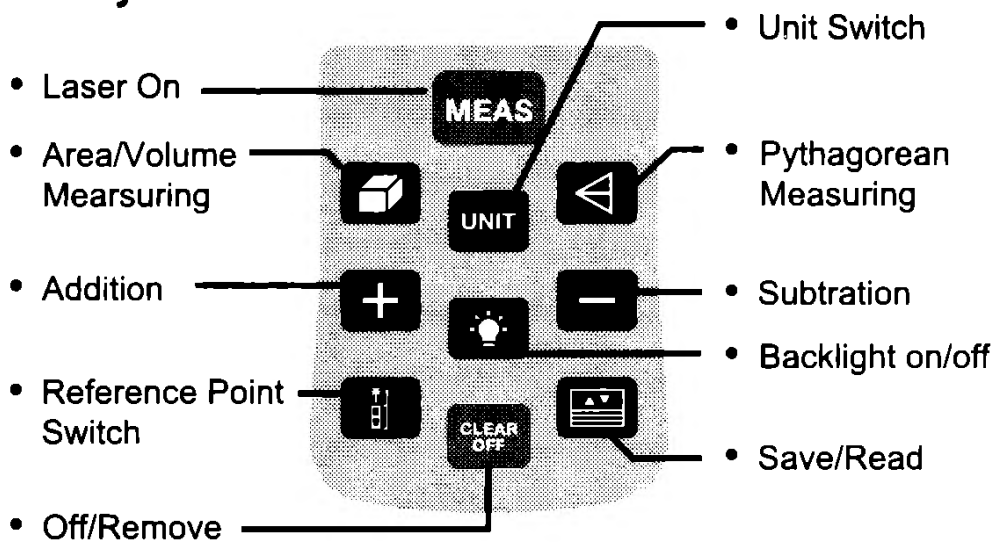


- Discharge the battery door on the back of device, and place battery according to correct polarity, then cover the battery door.
- Only 1.5 V AAA alkaline battery is applied to the meter.
- If not used for a long time, please take out the battery to avoid battery corrosion to meter body.

● Display Screen



● Keyboard



Start the instrument/Menu Setting

● Turn on/off the Meter

Under off status, press button MEAS, device and laser get starting simultaneously and stand by for measurement.

Under on status, long press button CLEAR OFF for 3 seconds to turn the device off. The device will be shut off without any operation for 150 seconds.

● Unit setting

Press button UNIT , reset current measurement unit, the default unit is: 0.000m

There are 6 units for selection

Length	Area	Volume
0.000m	$0.000m^2$	$0.000m^3$
0.00m	$0.00m^2$	$0.00m^3$
0.0in	$0.00ft^2$	$0.00ft^3$
0.00ft	$0.00ft^2$	$0.00ft^3$
0 1/16 in	$0.00ft^2$	$0.00ft^3$
0'00'1/16	$0.00ft^2$	$0.00ft^3$

- **Reference Point Setting**

  Press key to select the reference point. The device reference point by default is rear.

Length Measurement & Calculation

- **Single Distance Measuring:**

  Turn on the laser beam by short press of the button MEAS under measring mode, press the button MEAS again for single measurement of length, then the measured results displayed in the major display area.

- **Continuous Measuring:**

  Long press button MEAS under measuring mode and enter into continuous measuring mode.
  Minimum measuring result displays in auxiliary display area, present result displays in major display area. Short press botton MEAS to exit continuous measuring mode.

- **Area Measuring:**

  Press button , ▭ shows on the screen.
  One of the side of rectangle blinking on the display. Please follow the below instructions for area measuring:
  Press MEAS once for length
  Press MEAS again for width
  The device calculates and shows the result in the major display area.
  The resent measuring result of length is showed in the auxiliary display area.

Press CLEAR OFF , clear off the result and measuring again if necessary.
Press CLEAR OFF again to exit the mode.

- **Volume Measurement**

  Double press button , shows on the top of screen. One of the side of cube blinking on the display. Please follow the below instruction for volume measuring:

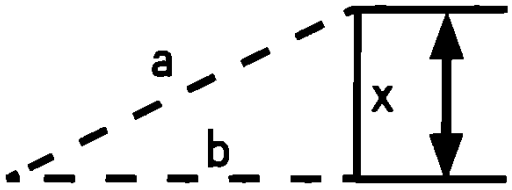
  Press MEAS for Length
  Press MEAS again for Width
  Press MEAS thirdly for Height

  The device calculates and shows the result in the major display area.
  Press CLEAR OFF , clear off the result and measuring again if necessary.
  Press CLEAR OFF again to exit the mode.

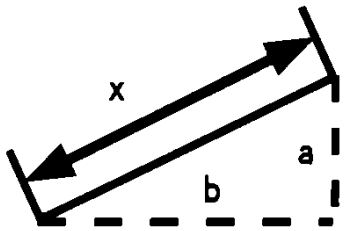
- **Pythagoras**

  There are four Pythagoras modes in case that user gets hard to reach the target.
  Press for mode selection:

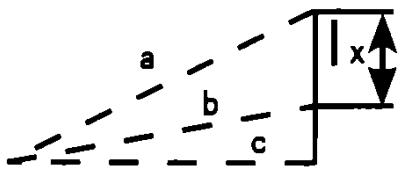
1) Press , the hypotenuse of blinking, calculate the second leg by measuring the hypotenuse and another leg.
Press MEAS , measure the length of hypotenuse (a) according to the blinking on the screen.
Press MEAS , measure the length of one leg (b)
Device calculates the length of another leg (x)



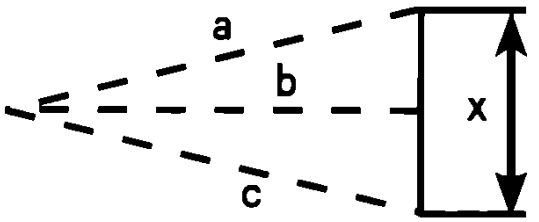
2) Press ◁ , when one leg of ◺ blinking, calculate the hypotenuse by measuring the length of two legs.
Press MEAS , measure the length of one leg (a)
Press MEAS , measure the length of another leg (b)
Device calculates the length of hypotenuse (x)



3) Press ◁ till the hypotenuse of ◺ blinking on the screen.
Press MEAS ,measure the length of one hypotenuse (a)
Press MEAS ,measure the length of another hypotenuse (b)
Press MEAS ,measure the length of one leg (c)
Device calculates the length of the leg in full line (x)



4. Press ◁ till the one hypotenuse side of ◁ blinking on the screen.
Press MEAS , measure the length of one side (a)
Press MEAS , measure the length of the median line (b)
Press MEAS , measure the length of another side (c)
Device calculates the length of the leg in full line (x)



Legs must short than hypotenuse, or there will be "err" shows on screen. In order to guarantee the accuracy, please make sure all measurements are start from the same point.

- **Addition / subtraction**

  The device can be used for length addition and subtraction under single distance measuring mode.
  Press [+], "+" shows in the major display area, entering cumulation mode. Value of last measurement and the result of cumulation will be showed on the screen.
  Press [−], "-" shows in the major display area, entering regression mode. Value of last measurement and the result of regression will be showed on the screen.

Save and Browse

The storage function can only be used under single measuring mode.

- **Save Measuring Results**

  Press [▣] for 3 seconds, the result will be automatically saved to the memory stick inside of the device.

- **Browse Measuring Results**

  Press [▣] to read the saved data. Press [+] or [−] to browse forward or backward. Long press [CLEAR OFF] to remove all history records.

Tips:

You may get some warning information as below:

Info message	Cause	Solution
Err1	Signal is too weak	Chose the surface with stronger reflectance. Use the reflecting plate.
Err2	Signal is too strong	Chose the surface with weaker reflectance. Use the reflecting plate.
Err3	Low battery voltage	Change the power supply.
Err4	The working temperature is too high, out of working range	Cool down the device.
Err5	Pythagoras measuring error.	Re-measure and ensure that Hypotenuse is bigger than Cathetus.
Err6	Device's memory got damaged	Contact with service center

Self-Calibration

This function can keep the precision of the device. Instruction: Power off, Long press button [UNIT] , and then press [MEAS] . Release the button [MEAS] , then release button [UNIT] till "CAL" and a figure under it display on the screen. User can adjust the figure with button [+] , [−] according to the accuracy of the meter. Adjusting range: -9 to 9mm, then, long press button [UNIT] to save the calibration result.

Technology specifications:

ITEM	Specifications
Distance measurement precision	±2mm
Measurement unit options	m/in/ft
Continuous measurement function	yes
Outdoor target reflection board	no
Area measuremen function	yes
Volume measurement function	yes
Pythagorean proposition measurement function	Full mode
Add and subtract measurement function	yes
Min/Max value	yes
Max storage	100 units
Automatic backlight	yes
Buttons/Keys sound	yes
Laser level	II
Laser type	635nm,<1mW
Automatically cut off laser	20s
Automatic shutdown	150S
Storage temperature	-20°C-60°C
Working temperature	0°C-40°C
Storage humidity	20%-80%RH
Battery	1.5V 2*AAA
Battery life	8000 times for single measurement
Weight (including battery)	128g
Dimension	118*54*26.5mm

Note: Use a target plate to increase the measurement range during daylight or if the target has poor reflection properties.

Instrument Maintenance:

- The meter should not be stored in high temperature and strong humidity environment for long time; if it is not used very often, please take out the battery and place the meter in the allocated potable bag and store in cool and dry place.

- Please keep the device surface cleaning. Wet soft cloth is applied to clean dust, but erosion liquid is never allowed to use for the meter maintenance. Laser output window and its focus lens can be maintained according to maintenance procedures for optical device.

Delivery Package

Please check if the accessories are completed according to the below list.

NO.	Item	Unit	QTY	Note
1	Laser distance meter E series	pc	1	
2	Power supply AAA	pc	2	
3	User' s manual	pc	1	
4	Portable bag	pc	1	
5	Hand strap	pc	1	
6	Giftbox	pc	1	
7	Outdoor target relection board	pc	1	Only 100m,120m, 150m